



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,587	03/08/2007	Brian E. Jones	GC800-2-US	4393

7590 01/29/2008
Janet K Castaneda
Genencor International Inc
925 Page Mill Road
Palo Alto, CA 94304-1013

EXAMINER

SAIDHA, TEKCHAND

ART UNIT	PAPER NUMBER
----------	--------------

1652

MAIL DATE	DELIVERY MODE
-----------	---------------

01/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER

Please find below a communication from the EXAMINER in charge of this application

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. §§ 1.821-1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

APPLICANT IS GIVEN 30 days FROM THE DATE OF THIS LETTER WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 C.F.R. §§ 1.821-1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 C.F.R. § 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. § 1.136. In no case may an applicant extend the period for response beyond the six month statutory period. Direct the response to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the response.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tekchand Saidha whose telephone number is (703) 305-6595. If the examiner cannot be reached, inquiries can be directed to Supervisory Patent Examiner, Ponnathapu Achutamurthy whose telephone number is (703) 308-3804. The fax number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.


TEKCHAND SAIDHA
PRIMARY EXAMINER

10/555,587

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Fri Aug 03 11:25:30 EDT 2007

=====

Reviewer Comments:

<210> 2

<211> 1209

<212> DNA

<213> Unknown

<220>

<223> environmental sample

<221> misc_feature

<222> 734

<223> n = A,T,C or G

<400> 2

atggtctggc tgcacggtgg gggctacact atcggcgag gctcgctgcc gccctacgat
60

ggagcagcct tcgcctcgcg ggatgtagtc ctggtgacgg tgaattaccg tcttgccat
120

ctcggtttt tcgcccattc ggcgctggat gaagaaaatc cagacggccc gggtcataat
180

ttcgcgcttt tagaccaaatt tgctgccctg aaatgggtgc aggaaaatat cgctgctttc
240

ggcggcgacg cggggaatgt cacgctgttt ggcgagctctg ccggggcgcg tagcgtgctt
300

tcgctgctgg cgtcgccgct ggcgaaaaac cttttccaca aaggtattat acaaagcgcc
360

tacacgttgc cggatgtcga caggaagaaa gccctgaaac gtggcgtagc gctggccggt
420

cattacgggc tgcaaaatgc cacagcggat gaactccgcg ctctgcctgc ggatgggctg
480

tgggcgcttg aagggccgct taacattggt ccaacgcaa tctccggcga cgtcgtgctg
 540
 cctgagccga tgctggatat attcttcgcc gggcgtcagc accgcatgcc cttgatggtc
 600
 gggagcaaca gcgacgaggc aagcgtgctg agctacttcg gcatcgatcc tgccgggcag
 660
 gtcgaactgc tgcgccgggg agcggcgctt cgggactggg ggcttatcaa actgctgtat
 720
 tcccggagtg aaanggggat gcccgaaactc gggcgacagg tgtgccgcga tatggctttt
 780
 nccncgctgg gttttgttgt gatgcaggcc cagcagcggg tcaatcagcc ctgctggcgc
 840

The above <222> response only indicates one "n" location (734); however,
 n's are also located at 781 and 784: please explain them.

(from Sequence 3)

<221> VARIANT

<222> 245, 260, 261

<223> Xaa = Any Amino Acid

<400> 3

Met	Val	Trp	Leu	His	Gly	Gly	Gly	Tyr	Thr	Ile	Gly	Ala	Gly	Ser	Leu
1				5					10					15	
Pro	Pro	Tyr	Asp	Gly	Ala	Ala	Phe	Ala	Ser	Arg	Asp	Val	Val	Leu	Val
			20					25					30		
Thr	Val	Asn	Tyr	Arg	Leu	Gly	His	Leu	Gly	Phe	Phe	Ala	His	Pro	Ala
		35					40						45		
Leu	Asp	Glu	Glu	Asn	Pro	Asp	Gly	Pro	Val	His	Asn	Phe	Ala	Leu	Leu
	50					55					60				
Asp	Gln	Ile	Ala	Ala	Leu	Lys	Trp	Val	Gln	Glu	Asn	Ile	Ala	Ala	Phe
65				70					75					80	
Gly	Gly	Asp	Ala	Gly	Asn	Val	Thr	Leu	Phe	Gly	Glu	Ser	Ala	Gly	Ala
			85					90						95	
Arg	Ser	Val	Leu	Ser	Leu	Leu	Ala	Ser	Pro	Leu	Ala	Lys	Asn	Leu	Phe
			100					105					110		
His	Lys	Gly	Ile	Ile	Gln	Ser	Ala	Tyr	Thr	Leu	Pro	Asp	Val	Asp	Arg
		115					120					125			
Lys	Lys	Ala	Leu	Lys	Arg	Gly	Val	Ala	Leu	Ala	Gly	His	Tyr	Gly	Leu
		130				135					140				
Gln	Asn	Ala	Thr	Ala	Asp	Glu	Leu	Arg	Ala	Leu	Pro	Ala	Asp	Gly	Leu

145		150		155		160									
Trp	Ala	Leu	Glu	Gly	Pro	Leu	Asn	Ile	Gly	Pro	Thr	Pro	Ile	Ser	Gly
			165						170					175	
Asp	Val	Val	Leu	Pro	Glu	Pro	Met	Leu	Asp	Ile	Phe	Phe	Ala	Gly	Arg
			180					185					190		
Gln	His	Arg	Met	Pro	Leu	Met	Val	Gly	Ser	Asn	Ser	Asp	Glu	Ala	Ser
			195					200				205			
Val	Leu	Ser	Tyr	Phe	Gly	Ile	Asp	Pro	Ala	Gly	Gln	Val	Glu	Leu	Leu
			210					215				220			
Arg	Arg	Gly	Ala	Ala	Phe	Pro	Asp	Trp	Gly	Leu	Ile	Lys	Leu	Leu	Tyr
225					230					235				240	
Ser	Arg	Ser	Glu	Xaa	Gly	Met	Pro	Glu	Leu	Gly	Arg	Gln	Val	Cys	Arg
				245						250				255	
Asp	Met	Ala	Phe	Xaa	Xaa	Leu	Gly	Phe	Val	Val	Met	Gln	Ala	Gln	Gln
				260						265				270	

The above <222> response is incorrect: while Xaa is located at 245, "Phe" is located at 260 (not Xaa). Xaa's are located at 261 and 262.

Application No: 10555587

Version No: 1.0

Input Set:

Output Set:

Started: 2007-08-01 10:04:38.617

Finished: 2007-08-01 10:04:39.579

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 962 ms

Total Warnings: 3

Total Errors: 8

No. of SeqIDs Defined: 3

Actual SeqID Count: 3

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 342	'n' position not defined found at POS: 1926 SEQID(1)
E 342	'n' position not defined found at POS: 1973 SEQID(1)
E 342	'n' position not defined found at POS: 1976 SEQID(1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
E 342	'n' position not defined found at POS: 781 SEQID(2)
E 342	'n' position not defined found at POS: 784 SEQID(2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
E 341	'Xaa' position not defined SEQID (3) POS (245)
E 341	'Xaa' position not defined SEQID (3) POS (261)
E 341	'Xaa' position not defined SEQID (3) POS (262)

SEQUENCE LISTING

<110> Genencor International, Inc.

Jones, Brian E.

Grant, William D.

Heaphy, Shaun

Rees, Helen C.

Grant, Susan

<120> Novel Lipolytic Enzyme LIP1

<130> GC801-2-PCT

<140> 10555587

<141> 2007-08-01

<150> PCT/US04/014752

<151> 2004-05-12

<150> US 60/469,931

<151> 2003-05-12

<160> 3

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 4313

<212> DNA

<213> Unknown

<220>

<223> environmental sample

<221> misc_feature

<222> 1926, 1973, 1976

<223> n = A,T,C or G

<400> 1

tctatgagca acaaggcgggt tttagcgaag cgcaggccga tgagtgttg ggcgaggcgc	60
tggaaacatt ccgctggcac cagcacgcaa cggttgacgc cgaaacctac cgcgcgttgc	120
atgatgagca ccggtgatc gccgatgtag tctgcttccg tggttgccac attaacacc	180
tgaccccgcg cagctcgat atcgaccgcg tgcagtcgct gatgccgaa cgcggaatta	240
ccccaaaagc cattatcgaa gggcccgccg gccgcgagcg cccgatttta ctgcgccaga	300
ccagctttaa agcgctggaa gagectattt tgttcgccgg tgagcatcac ggaacgcata	360
ccgcccgttt cggcgaaata gaacagcgcg gcgtagcgct gacgccgaaa ggccggggcg	420
tgtacgacga actgctgctg gcggcgggca acggcacgga taatctcagc caccagcagc	480
atttacagca agtgttcacc gtttcccgga cagcgacgcg ctgctgcgcc gccaggggct	540
ggcctatttc cgctatcggt tgacgcccgt tggcgaaatg caccgccact caatcaagcc	600
aggcgacgac ccgcagctgc ttatagaacg cggctggctg gtggcgagc cggttattta	660
tgaagatttc ctcccgttca gcgcggcggt tattttccag tcaaaccttg gcagcgacgg	720
cgggcaacgg cagcacggcc attccagccg cagcgagttt gaacaggccc ttggcgagca	780
ggttgacgac gagttcgccc tctatcagca ggccgaggat cgcagtaaac gccgttgccg	840
tttgctgtaa acgcgctacc ctgctggagt gtcagtaaca aggaacagca gatggaacaa	900
gttggttagcc gttgctcagg ggagactgag cggcggttctt caggggaaag ttgcggtcta	960

tgcgggcatc	ccctttgcgc	ctccgcccgt	gggtgaactg	cgctggcggg	cacctcgtec	1020
cccggcgcac	tggcagggtg	tccgccaggc	ggatacattt	gcgcctgcat	gctggcaaag	1080
cctcgaatac	tgcaaagcgg	ttggcgcgcg	cgatcccggc	cagttttctg	aagattgcct	1140
gtatctcaat	atctggaccc	cgccccggcg	ggatgcggag	ccgctgccgg	ttatggtctg	1200
gctgcacggt	gggggctaca	ctatcggcgc	aggtctcgctg	ccgccctacg	atggagcagc	1260
cttcgcctcg	cgggatgtag	tcctggtgac	ggtgaattac	cgctctggcc	atctcggtt	1320
tttcgcccat	ccggcgctgg	atgaagaaaa	tccagacggc	ccggttcata	atttcgcgct	1380
tttagaccaa	attgctgcc	tgaaatgggt	gcaggaaaat	atcgctgctt	tcggcggcga	1440
cgcggggaat	gtcacgctgt	ttggcgagtc	tgccggggcg	cgtagcgtgc	tttcgctgct	1500
ggcgctgcgc	ctggcgaaaa	accttttcca	caaaggtatt	atacaaagcg	cctacacgtt	1560
gccggatgtc	gacaggaaga	aagccctgaa	acgtggcgta	gcgctggccg	gtcattacgg	1620
gctgcaaaat	gccacagcgg	atgaactccg	cgctctgcct	gcggatgggc	tgtgggcgct	1680
tgaagggcgc	cttaacattg	gtccaacgcc	aatctccggc	gacgtcgtgc	tgcttgagcc	1740
gatgctggat	atattcttcg	ccgggcgtca	gcaccgcatg	cccttgatgg	tcgggagcaa	1800
cagcgacgag	gcaagcgtgc	tgagctactt	cggcatcgat	cctgccgggc	aggtcgaact	1860
gctgcgccgg	ggagcggcgt	ttccggactg	ggggcttata	aaactgctgt	attcccggag	1920
tgaaannggg	atgcccgaa	tcgggcgaca	ggtgtgccgc	gatatggctt	ttncncgct	1980
gggttttgtt	gtgatgcagg	cccagcagcg	ggtcaatcag	ccctgctggc	gctactattt	2040
tgattatgtg	ggggaggcgg	aacgtaaaa	ctatgccaac	ggcacctggc	acggcaacga	2100
agtgcggtat	gtttttgaca	cgttaagtct	gacgccaccc	gcaagtgaat	acgtcaacca	2160
aaacgatctc	acgtttgccg	ggcaaatttg	tgactactgg	accggttttg	cccgcagcgc	2220
cgggtccccc	agtaaaagcg	taccgggccc	gctaagctgg	cctgcctgcg	ttcggcgcaa	2280
ggaccgaacg	atgcggttag	gcgttctact	gcgggcgcgg	ttcaaagtgg	aaaaccgctt	2340
tatgcgcatg	agaatgcagc	tgtttaagcg	ggtcatgaag	catcacgtca	gccttgactg	2400
agcaactcat	ggcaaaatgc	ttcaagcccc	gcggcgtgct	cgctgccggg	tttaaccgcc	2460
agacggtagc	ccgcaccggt	ttttacactg	cgatcaaacg	gcctgaccag	ccgcccggtg	2520
cgaatatctt	ctgccaccag	cgtttcatcg	gcgatggcga	tcccaaacc	ctgaatagcg	2580
gcgctgatgg	cgagatccat	agtgtcaaaa	tgctgatttt	tactcattgc	ctgccagggc	2640
gcaagaaaac	ccggttctgc	cagaagtgc	cagtcggtgc	ggtcccgcgt	tgggtgcaaa	2700
aatgtcagtc	tttcccagcc	gctatcttct	tttggcagca	ggctctggct	tacaaccggc	2760
gtcagcgctt	cctcgaaaca	cagcgtgccg	gttttcgcgc	actgcccaaa	aacaattgcc	2820
gcgtcaaacg	gctcattttt	gaagttcacg	ccgtgctcaa	cggtcgtggt	cagcgcaacc	2880
tgtagctccg	gcatgcgttg	ttcaagctga	atcagctttg	gcaccagcca	gcgcacgcgc	2940
cagggttggcg	ctttaagacg	aataatttct	ggcttggtgg	aggcgcggtc	ggctacgtcc	3000
agcagattat	tgaacgcgct	ttgtaattcc	gggagcaggg	cgctgccctg	tggcgtaagg	3060
cgcagcccgc	gcgcgtggcg	ttcaaaaagc	gcaaagccaa	gccactgttc	gagggcggca	3120
attttgccgc	tgacggcgcc	ctgggtgagg	caaagttcct	tcgcggccct	ggtcagggtc	3180
agggtgcctg	cggttgacga	gaaaagcgtc	cagagtattc	aggggaaaa	tgcgccgcgt	3240
catgatgtc	tcggttgagc	tatgcatttt	ttgcatggct	attatgacaa	caattcgatt	3300
gtcgtggcaa	tcgcatccgg	attgaatagt	tatgcaaatc	gcatattggt	caggagcggc	3360
tatggccatg	caaaccgccg	tgcaacatcg	ttcaaaactg	ccggatgtag	gaaccaccat	3420
atttacgggt	atcggtcagc	tttccgccca	acataaggcg	atcaaccttt	ctcagggcgc	3480
gccccacttc	ccctgtgacc	cgcagcttat	tgccggagtc	accaggggcaa	tgcaggaggg	3540
gcataaaccg	tatgcgtcca	tgaccggact	tgcgctcgctg	aaaaatctta	ttgctgaaaa	3600
agtcgcggcg	ctttacggct	caacctacga	tcgggcggat	gaagtgctgg	ttaccgccag	3660
cgccagcgaa	gggctgtatt	ccgctatcgg	cggactggta	caccccgcg	acgaagttat	3720
ctatttcgaa	ccctcttttg	acagctacgc	gccgattggt	cggtccagg	gcgcaacgcc	3780
ggttgccctt	aagctcagcc	tgcttgactt	caccattaac	tgggatgaag	tgcgcgctgc	3840
cataacgcgc	cgtacccgca	tgattattgt	caacacgcgc	cataacccaa	gcgggcaggt	3900
gttcagcgct	catgatctcg	aaatgctggc	ggcgcttacc	cgtaatacgg	atatcgttgt	3960
cctgtctgac	gaagtgtacg	agcacatcgt	gtttgacgga	caaaagcatc	acggcatggc	4020
cacgcacccg	cagcttgccg	agcgtagcgt	tatcgtttca	tcgtttggca	aaaccttcca	4080
tgttaccggc	tgggcgctgg	ggtactgcct	ggcgcccgc	gcgttgatgg	atgagatttg	4140
caaggtgcat	cagttcctga	tgttttcagc	cgatacgcca	atgcagcacg	cttttgctga	4200
ttacatgagc	gatccgcaaa	cttatctctc	gctggcgagc	ctttaccagc	gcaagcgtga	4260
tttaatgcag	tctctgctgg	cggagtcgcc	attcgagctg	ctgccgagcg	ccg	4313

<210> 2
<211> 1209
<212> DNA
<213> Unknown

<220>
<223> environmental sample

<221> misc_feature
<222> 734
<223> n = A,T,C or G

<400> 2
atggtctggc tgcacggtgg gggtacact atcggcgag gctcgctgcc gccctacgat 60
ggagcagcct tcgcctcgcg ggatgtagtc ctggtgacgg tgaattaccg tcttgccat 120
ctcgctttt tcgcccattc ggcgctggat gaagaaaatc cagacggccc ggttcataat 180
ttcgcgcttt tagaccaaat tgctgcctg aaatgggtgc aggaaaatat cgtgctttc 240
ggcggcgagc cggggaatgt cacgctgttt ggcgagctcg cggggcgcg tagcgtgctt 300
tcgctgctgg cgctgcgcgt ggcgaaaaac cttttccaca aaggattat acaaagcgcc 360
tacacgttgc cggatgtcga caggaagaaa gccctgaaac gtggcgtagc gctggcgggt 420
cattacgggc tgcaaaatgc cacagcggat gaactccgcg ctctgcctgc ggatgggctg 480
tggcgcttg aagggccgct taacattggt ccaacgcaa tctccggcga cgtcgtgctg 540
cctgagccga tgctggatat attcttcgcc gggcgtcagc accgcatgcc cttgatggtc 600
gggagcaaca gcgacgagc aagcgtgctg agctacttcg gcacgatcc tgccgggcag 660
gtcgaactgc tgcgccgggg agcggcgctt ccggactggg ggcttatcaa actgctgtat 720
tcccggagtg aaanggggat gcccgaactc gggcgacagg tgtgccgcga tatggctttt 780
nccncgctgg gttttgttgt gatgcaggcc cagcagcggg tcaatcagcc ctgctggcgc 840
tactattttg attatgtggg ggaggcggaa cgtaaaatct atgccaacgg cacctggcac 900
ggcaacgaag tgccgtatgt ttttgacacg ttaagtctga cgccaccgc aagtgaatac 960
gtcaacaaaa acgatctcac gtttgccggg caaatttggt actactggac ccgttttgcc 1020
cgcagcgccg gtcccccacag taaagcgata ccggggccgc taagctggcc tgctgcgtt 1080
cgcgccaagg accgaacgat gcggttaggc gttcactcgc gggcgcggtt caaagtggaa 1140
aaccgcttta tgcgcatgag aatgcagctg ttttaagcggg tcatgaagca tcacgtcagc 1200
cttgactga 1209

<210> 3
<211> 402
<212> PRT
<213> Unknown

<220>
<223> environmental sample

<221> VARIANT
<222> 245, 260, 261
<223> Xaa = Any Amino Acid

<400> 3
Met Val Trp Leu His Gly Gly Gly Tyr Thr Ile Gly Ala Gly Ser Leu
1 5 10 15
Pro Pro Tyr Asp Gly Ala Ala Phe Ala Ser Arg Asp Val Val Leu Val
20 25 30
Thr Val Asn Tyr Arg Leu Gly His Leu Gly Phe Phe Ala His Pro Ala
35 40 45
Leu Asp Glu Glu Asn Pro Asp Gly Pro Val His Asn Phe Ala Leu Leu
50 55 60
Asp Gln Ile Ala Ala Leu Lys Trp Val Gln Glu Asn Ile Ala Ala Phe

65	70	75	80
Gly Gly Asp Ala Gly Asn Val Thr Leu Phe Gly Glu Ser Ala Gly Ala			
85	90	95	
Arg Ser Val Leu Ser Leu Leu Ala Ser Pro Leu Ala Lys Asn Leu Phe			
100	105	110	
His Lys Gly Ile Ile Gln Ser Ala Tyr Thr Leu Pro Asp Val Asp Arg			
115	120	125	
Lys Lys Ala Leu Lys Arg Gly Val Ala Leu Ala Gly His Tyr Gly Leu			
130	135	140	
Gln Asn Ala Thr Ala Asp Glu Leu Arg Ala Leu Pro Ala Asp Gly Leu			
145	150	155	160
Trp Ala Leu Glu Gly Pro Leu Asn Ile Gly Pro Thr Pro Ile Ser Gly			
165	170	175	
Asp Val Val Leu Pro Glu Pro Met Leu Asp Ile Phe Phe Ala Gly Arg			
180	185	190	
Gln His Arg Met Pro Leu Met Val Gly Ser Asn Ser Asp Glu Ala Ser			
195	200	205	
Val Leu Ser Tyr Phe Gly Ile Asp Pro Ala Gly Gln Val Glu Leu Leu			
210	215	220	
Arg Arg Gly Ala Ala Phe Pro Asp Trp Gly Leu Ile Lys Leu Leu Tyr			
225	230	235	240
Ser Arg Ser Glu Xaa Gly Met Pro Glu Leu Gly Arg Gln Val Cys Arg			
245	250	255	
Asp Met Ala Phe Xaa Xaa Leu Gly Phe Val Val Met Gln Ala Gln Gln			
260	265	270	
Arg Val Asn Gln Pro Cys Trp Arg Tyr Tyr Phe Asp Tyr Val Gly Glu			
275	280	285	
Ala Glu Arg Lys Ile Tyr Ala Asn Gly Thr Trp His Gly Asn Glu Val			
290	295	300	
Pro Tyr Val Phe Asp Thr Leu Ser Leu Thr Pro Pro Ala Ser Glu Tyr			
305	310	315	320
Val Asn Gln Asn Asp Leu Thr Phe Ala Gly Gln Ile Cys Asp Tyr Trp			
325	330	335	
Thr Arg Phe Ala Arg Ser Ala Gly Pro His Ser Lys Ala Ile Pro Gly			
340	345	350	
Pro Leu Ser Trp Pro Ala Cys Val Arg Gly Lys Asp Arg Thr Met Arg			
355	360	365	
Leu Gly Val His Ser Arg Ala Arg Phe Lys Val Glu Asn Arg Phe Met			
370	375	380	
Arg Met Arg Met Gln Leu Phe Lys Arg Val Met Lys His His Val Ser			
385	390	395	400
Leu Asp			